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## Tools for moulding — Components of compression and injection moulds and diecasting dies — List of equivalent terms and symbols

*Outilage de moulage — Composants des moules par compression, moules d'injection et moules pour fonderie sous pression — Termes et symboles*

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## **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 8, *Tools for pressing and moulding*.

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This second edition cancels and replaces the first edition (ISO 12165:2000) which has been technically revised.

[ISO 12165:2019](http://www.iso.org/iso/12165-2019)

The main change compared to the previous edition is the addition of the reference to ISO 16915.

In addition to text written in two of the three official ISO languages (English and French), this document gives text in German and Swedish. This text is published under the responsibility of the member bodies for Germany (DIN) and Sweden (SIS) and is given for information only. Only the text given in the official languages can be considered as ISO text.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Tools for moulding — Components of compression and injection moulds and diecasting dies — List of equivalent terms and symbols

## 1 Scope

This document specifies the terms generally in use for components of compression and injection moulds and diecasting dies. The function of these components is shown in [Figure 1](#) to [Figure 30](#).

NOTE The figures are given as examples.

The purpose of this document is to introduce coherent terms in professional terminology particularly with regard to the use in CAD (Computer Aided Drafting).

Various symbols are specified for simplified representation on technical drawings.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

## 4 Nomenclature for components

### 4.1 Plates

[Table 1](#) gives the equivalent terms related to plates in English, French, German and Swedish and provides for each listed component, the key and the reference of the figure where this component is shown and the reference of ISO standard of this component, when it exists.

Table 1 — Nomenclature related to plates

Designation				Relevant Figure	Relevant key	ISO reference
English	French	German	Swedish			
clamping plate, overhanging with centring recess	semelle débordante avec logement pour bague de centrage	Aufspannplatte, überstehend mit Zentrierausdrehung	fästplatta, överhängande, med centreringsursvarvning	<a href="#">11</a>	1	ISO 6753-2
clamping plate, overhanging without centring recess	semelle débordante sans logement pour bague de centrage	Aufspannplatte, überstehend ohne Zentrierausdrehung	fästplatta, överhängande, utan centreringsursvarvning	<a href="#">11</a>	2	ISO 6753-2
clamping plate, flush with centring recess	semelle non débordante avec logement pour bague de centrage	Aufspannplatte, bündig mit Zentrierausdrehung	fästplatta, utan överhängande, med centreringsursvarvning	<a href="#">11</a>	3	ISO 6753-2
clamping plate, flush without centring recess	semelle non débordante sans logement pour bague de centrage	Aufspannplatte, bündig ohne Zentrierausdrehung	fästplatta, utan överhängande, utan centreringsursvarvning	<a href="#">11</a>	4	ISO 6753-2
cavity plate, fixed half	plaqué porte-empreinte, partie fixe	Formplatte, feste Seite	formplatta fast sida	<a href="#">11</a>	5	ISO 6753-2
cavity plate, moving half	plaqué porte-empreinte, partie mobile	Formplatte, bewegliche Seite	formplatta rörlig sida	<a href="#">11</a>	6	ISO 6753-2
intermediate plate	plaqué intermédiaire	Zwischenplatte	stödplatta	<a href="#">11</a>	7	ISO 6753-2
ejector retainer plate	plaqué d'éjection	Auswerferhalteplatte	utstötarfästplatta	<a href="#">11</a>	8	ISO 6753-2
ejector base plate	contre-plaque d'éjection	Auswerfergrundplatte	utstötargrundplatta	<a href="#">11</a>	9	ISO 6753-2
riser	tasseau	Leisten	linjal	<a href="#">11</a>	10	ISO 6753-2

## 4.2 Accessories

[Table 2](#) gives the equivalent terms of accessoires in English, French, German and Swedish and provides for each listed component, the key and the reference of the figure where this component is shown and the reference of ISO standard of this component, when it exists.

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Table 2 — Nomenclature related to accessories

English	French	German	Swedish	Relevant figure	Relevant key	ISO reference
ejector rod	queue d'éjection	Auswerferbolzen	utstötarbult	<a href="#">16, 21, 25</a>	11	
seating washer	repos d'éjection	Anschlagscheibe	anlagsbricka	<a href="#">16</a>	12	
distance disc	entretoise	Distanzscheibe	distsbricka	<a href="#">17, 21</a>	14	
compression spring, round cross section	ressort de compression, section ronde	Druckfeder, runder Querschnitt	tryckfjäder med rund trådprofil	<a href="#">16</a>	15	
spring plunger	vis à bille	federndes Druckstück	kulstopp	<a href="#">16</a>	16	
locating guide pillar, shouldered	colonne de guidage avec plot de centrage	Führungssäule, abgesetzt, mit Zentrieransatz	styrpelare med bakstyrning <a href="#">23, 25</a> <a href="#">26</a>	<a href="#">16, 23, 25, 26</a>	17	ISO 8017
guide pillar, shouldered	colonne de guidage sans plot de centrage	Führungssäule, abgesetzt, ohne Zentrieransatz	styrpelare utan bakstyrning <a href="#">23</a>	<a href="#">23</a>	18	ISO 8017
angle pin	doigt de démoulage	Schrägsäule	snedpinne	<a href="#">16, 30</a>	19	ISO 8404
guide pillar	colonne de guidage	Führungssäule	styrpelare	<a href="#">16, 20</a>	20	ISO 8017
locating guide bush, headed	bague de guidage avec plot de centrage	Führungsbuchse mit Zentrieransatz	styrbussning med centringstapp <a href="#">21, 22, 25</a>	<a href="#">18, 21, 22, 25</a>	21	ISO 8018
guide bush, headed	bague de guidage sans plot de centrage	Führungsbuchse ohne Zentrieransatz	styrbussning utan centringstapp <a href="#">23, 24</a>	<a href="#">18, 23, 24</a>	22	
guide sleeve	douille de guidage	Führungs hülse	styrylsa	<a href="#">18, 26</a>	23	
hexagon socket set screw	vis à six pans creux sans tête	Gewindestift mit Innensechskant	stoppskruv med sexkantshål <a href="#">23</a>	<a href="#">16, 23</a>	24	ISO 4028
core pin	broche	Kernstift	kärmstift	<a href="#">20, 22, 24</a>	25	
ball bearing guide bush	bague de guidage à bille	Kugelführungsbuchse	linjärt rullningslager <a href="#">25</a>	<a href="#">16, 25</a>	26	
lifting eye bolt	anneau de levage	Ringschraube	lyftögleskruv <a href="#">22</a>	<a href="#">22</a>	27	ISO 3266
countersunk socket head screw	vis à tête fraisée à six pans creux	Senkschraube mit Innensechskant <a href="#">23</a>	sänkskruv med sexkantshål <a href="#">21</a>	<a href="#">17, 21</a>	28	ISO 10642
support pillar	pilier d'entretoisement	Stützrolle	stödkuts	<a href="#">16, 25</a>	29	ISO 10073
disc spring	ressort à disques	Tellerfeder	tallriksfjäder	<a href="#">16</a>	30	
locating element, round centring sleeve	plot de centrage	Zentriereinheit, rund	centringsenhet, rund	<a href="#">16, 17, 21</a>	31	ISO 8406
locating ring, moving half	douille de centrage	Zentrierhülse	centringshylsa <a href="#">26</a>	<a href="#">16, 18, 22, 26</a>	32	ISO 9449
	bague de centrage, partie mobile	Zentrierflansch, bewegliche Seite	centringsring, rörlig sida <a href="#">16, 17, 25</a>	<a href="#">16, 17, 25</a>	33	ISO 10907

**Table 2 (continued)**

Designation					
English	French	German	Swedish	Relevant Figure	Relevant key
locating ring, fixed half	bague de centrage, partie fixe	Zentrierflansch, feste Seite	centringsring, fast sida	<u>16</u> , <u>17</u> , <u>25</u>	34
hexagon socket head cap screw	vis à tête cylindrique à six pans creux	Zylinderschraube mit Innensechskant	sexkanthållsskrub	<u>16</u> , <u>17</u> , <u>18</u> , <u>19</u>	35
dowel pin	goupille cylindrique	Zylinderstift	styppinne (härdad cylinderdrisk pinne)	<u>16</u> , <u>25</u>	36

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#### **4.3 Components for gating**

[Table 3](#) gives the equivalent terms of components for gating in English, French, German and Swedish and provides for each listed component, the key and the reference of the figure where this component is shown and the reference of ISO standard of this component, when it exists.

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**Table 3 — Nomenclature related to components for gating**

Designation						Relevant Figure	Relevant key	ISO reference
English	French	German	Swedish					
sprue bush	buse d'injection	Angießbuchse	ingörsbussning	<u>16</u> , <u>20</u> , <u>22</u> , <u>29</u>		37		ISO 10072
sprue puller insert	arrache carotte	Angusshaltebuchse	görturdragarbussing	<u>20</u>		38		ISO 16915
heated nozzle, single probe	buse chaude	beheizte Angießdüse, Einfachanschnitt	varmötsdysa	<u>17</u> , <u>18</u>		39		
distributor bushing, unheated	reçu de buse de presse non chauffé	Zwischenbuchse, unbeheizt	inloppsbussning, kall	<u>18</u> , <u>19</u> , <u>26</u>		40		
filter cartridge	cartouche filtrante	Filtereinsatz	filterinssats	<u>21</u> , <u>26</u>		41		
hot runner manifold block, straight bar	bloc chaud en ligne	Heißkanal-Verteilerblock, Balkenform	varmikanalblock, balkform	<u>18</u> , <u>21</u> , <u>24</u> , <u>26</u>		42		
pneumatic nozzle	buse pneumatique	Pneumatik-Düse	pneumatiskt munstycke	<u>25</u>		44		
pneumatic needle valve	obturateur pneumatique	Pneumatik-Nadelventil	pneumatiskt munstycke	<u>18</u>		45		
spacer disc	cale	Stützscheibe	stöðbricka	<u>24</u> , <u>26</u>		46		
torpedo	busette d'injection	Düsenterpedo	munstyckstorped	<u>26</u>		47		
melt chamber bush	douille pré-chambre	Vorkammerbuchse	förkammarbussning	<u>19</u> , <u>29</u>		48		

#### **4.4 Components for cooling/heating**

[Table 4](#) gives the equivalent terms of components for cooling/heating in English, French, German and Swedish and provides for each listed component, the key and the reference of the figure where this component is shown and the reference of ISO standard of this component, when it exists.

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